REMARKS

Claims 1, 2, 4-20, 22-36 and 38-52 were presented for examination. Claims 1, 2, 4-20, 22-36, and 38-52 stand rejected. In the current amendment, claims 1, 4-11, 15-16, 91, 22-29, 31-32, 35, 38-45, 49, and 51-52 have been amended and claim 53 has been added. No new matter has been introduced. Upon entry of the current amendment, claims 1, 2, 4-20, 22-36 and 38-53 will be presently pending in this application, of which claims 1, 19, 35 and 36 are independent. Applicants submit that pending claims 1, 2, 4-20, 22-36 and 38-53 are in condition for allowance.

The following comments address all stated grounds of rejection. The Applicants urge the Examiner to pass the claims to allowance in view of the remarks set forth below.

Claim Amendments

Claims 1, 4-11, 15-16, 19, 22-29, 31-32, 34-35, 38-45, 49 and 51-52 have been amended and claim 53 added to clarify and more fully appreciate the Applicants' claimed invention. Support for the amended and added claims can be found on page 5, lines 4-9; page 7, lines 5-17; Figure 1; and throughout the remainder of the specification. No new matter has been introduced. Applicants submit that the presently pending claims are in condition for allowance.

Claim Rejections Under 35 U.S.C. §103

Claims 1, 2, 4-20, 22-36, and 38-52 stand rejected under 35 U.S.C. §103. For ease of the discussion below, each claim rejection under 35 U.S.C. §103 is discussed separately.

I. Claims Stands Rejected under 35 U.S.C. §103 as Unpatentable over Young in view of Weitz

Claims 1, 2, 8, 12, 13, 15, 16, 18-20, 26, 30, 32, 34-36, 42, 46, 47, 50 and 51 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Young et al. ("A Knowledge Based Electronic Information and Documentation System", ACM, January 2000) ("Young") in view of Weitz ("SGML nets: Integrating Document and Workflow Modeling", IEEE, 1998) ("Weitz"). Applicants respectfully traverse this rejection.

A. Non-obviousness of Independent Claims 1, 19, and 35

Amended independent claims 1, 19 and 35 are directed to a method, program and system, respectively. These independent claims recite a set of reporting components that can be assembled to form a report template. The reporting components are configurable to define one or more operations to perform within a technical computing environment. A report is generated from the processing of the reporting components of the report template to initiate the reporting components to perform the one or more operations configured by the reporting components. One of the reporting components is configured to bi-directionally communicate with a simulation of a simulation model during the execution of the simulation. During generating the report, the reporting component is initiated to bi-directionally communicate with the simulation of the model during the execution of the simulation. For example, the reporting component may be configured to perform the operation of issuing a command to the simulation of the model during the execution of the simulation. As such, when the reporting component is processed to generate the report, the reporting component issues a command to the simulation during the execution of the simulation. In this manner, the reporting components can change the running simulation and receive information from the simulation to incorporate into the report as it is generated. This

allows the report generation process to create reports associated with information related to the execution of a simulation.

Young in view of Weitz does not teach or suggest a set of reporting components configurable to define an operation to *bi-directionally communicate with a simulation of a model during an execution of the simulation.* The Examiner compares the notebook cells of Young to the reporting components of the present invention. In contrast to the present invention, the notebook cells of Young are not configured with an operation defined to bi-directionally communicate with a simulation of simulation model during the execution of the simulation. Young describes the notebook cells as being interactive to give the viewer more control in comparison to traditional web page viewing. An area of a notebook cell can be made active as indicated by color and underlining in a similar manner as a hyperlink. When the active area is selected, a function can be invoked to provide viewing control (see Young, page 282, column 2, paragraph 2, lines 4-18). For example, the active area when clicked may invoke a hyperlink jump action. In another example, the active area when clicked may invoke a function to move an area of the notebook into view. As such, Young is focused on providing an HTML browser paradigm by providing functions in active cell areas to jump to other cell areas of the notebook (see Young, page 282, column 2, paragraph 3, lines 10-12). Therefore, Young fails to teach or suggest a set of reporting components configurable to define an operation to *bi-directionally communicate with a simulation of a model during the execution of the simulation.*

Furthermore, Young in view of Weitz does not teach or suggest that during the generation of a report to initiate one of the reporting components *to bi-directionally communicate with the simulation of a model during an execution of the simulation.* In contrast to the reporting components of the present invention, the notebook cells of Young do not invoke a

function configured by the notebook cell when the notebook cell is processed to generate an electronic notebook. The processing of notebook cells converts terms found in the text of the notebook cell matching knowledge base nodes or specification files into hyperlinks (see Young, page 283, column 1, paragraph 5, line 1 to page 283, column 2, paragraph 1, line 6). This provides the hyperlink interactivity of the notebook cell to give users viewing control similar to an HTML browser paradigm. During the generation of a notebook, the functions associated with an active area of the notebook cell are not invoked. Rather, these notebook cell functions are invoked by a user viewing the notebook cell after the notebook is generated and not during the notebook generation process. Moreover, during the notebook generation process, the notebook cells do not bi-directionally communicate with the simulation of a model during execution of the simulation. Therefore, Young in view of Weitz fails to teach or suggest that during the generation of a report to initiate one of the reporting components *to bi-directionally communicate with the simulation of a model during an execution of the simulation.*

The Examiner cites Weitz merely for the purpose of suggesting that one ordinarily skilled in the art might modify Young to define a set of reporting components that can be assembled to form a report template. As with Young, Weitz does not teach or suggest reporting components configurable to define an operation to *bi-directionally communicate with a simulation of a model during the execution of the simulation,* and furthermore, does not teach or suggest during generation of a report to initiate one of the reporting components *to bi-directionally communicate with the simulation of a model during an execution of the simulation.* As such, Weitz fails to bridge the factual deficiencies of Young as a reference.

For the above discussed reason, Young in view of Weitz fails to detract from the patentability of independent claims 1, 19 and 35, as amended. Claims 2, 8, 12, 13, 15, 16 and 18

depend on and incorporate the patentable subject matter of amended independent claim 1, claims 20, 26, 30, 32, and 34 depend on and incorporate the patentable subject matter of amended independent claim 19, and claims 36, 42, 46, 47, 50 and 51 depend on and incorporate the patentable subject matter of amended independent claim 19. Accordingly, Applicants respectfully request the withdrawal of the Examiner's rejection of claims 1, 2, 8, 12, 13, 15, 16, 18-20, 26, 30, 32, 34-36, 42, 46, 47, 50 and 51 under 35 U.S.C. §103.

II. Rejection of Claims under 35 U.S.C. §103(a) as Unpatentable over Young in view of Weitz in further view of Lannert

Dependent claims 4-7, 9, 11, 14, 17, 22-25, 27, 29, 31, 33, 38-41, 43, 45, 48 and 52 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Young in view of Weitz and in further view of Lannert et al (U.S. Patent No. 6,101,489) ("Lannert"). Applicants respectfully traverse this rejection.

A. Non-Obviousness of Dependent Claims 4, 5, and 11

Young in view of Weitz in further view of Lannert does not teach or suggest each and every feature of dependent claims 4, 5, and 11, as amended. Claim 4 recites the processing of reporting components includes initiating one of the reporting components configured to perform the operation of issuing instructions to the computing environment to modify one of an operational parameter and an initial condition of the simulation of the model. Claim 5 recites the processing of reporting components includes initiating one of the reporting components configured to perform the operation of reconfiguring the model by adding or removing a functional block from the model. Claim 11 recites the processing of reporting components includes initiating one of the

reporting components configured to perform the operation of issuing commands to the simulation of the model to advance a current state of the simulation by one or more time steps. The Examiner admits that Young in view of Weitz does not teach the features of claims 4, 5 and 11. The Examiner cites Lannert for the purpose of suggesting that one ordinarily skilled in the art might modify Young in view of Weitz to include the features cited in claims 4, 5, and 11. Applicants submit that Lannert fails to detract from the patentability of amended claims 4, 5 and 11.

Lannert lacks the features of the reporting components recited in amended claims 4, 5 and 11. In the Advisory Notice, the Examiner compares the simulation data in the cells of the simulator spreadsheet in Lannert to the reporting components of the present invention. In contrast to the present invention, the simulation data of the spreadsheet in Lannert is not configured to perform an operation within a technical computing environment, and furthermore, is not initiated during the generation of a report to perform the operation configured by the cell. Lannert describes the different cells in the spreadsheet model as parameter inputs and parameter outputs for a system dynamics model (see Lannert, column 94, lines 30-35). The output parameters in a cell may contain a value from a result of the simulation. This output cell is merely written to by the simulator and is used to provide results to the users of the simulator. As such, the simulation parameter data in the cell is not a reporting component configured to define an operation to perform, such as any of the operations cited in claims 4, 5 and 11. Therefore, Lannert fails to teach or suggest a reporting component comprising the features recited in claims 4, 5 and 11. Accordingly, Applicants respectfully request the withdrawal of the Examiner's rejection of claims 4, 5, and 11 under 35 U.S.C. §103.

B. Non-obviousness of Claims Dependent on Independent Claims 1, 19 and 35

As discussed above, Young in view of Weitz fails to detract from the patentability of independent claims 1, 19 and 35, as amended. As such, Applicants contend that independent claims 1, 19 and 35 are patentable and in condition for allowance. Therefore, claims 4-7, 9, 11, 14 and 17 dependent from amended independent claim 1, claims 22-25, 27, 29, 31, 33, 38-41 and 43 dependent on amended independent claim 19, and claims 48 and 52 dependent on amended independent claim 35 are patentable and in condition for allowance. Accordingly, Applicants respectfully request the withdrawal of the Examiner's rejection of claims 4-7, 9, 11, 14, 17, 22-25, 27, 29, 31, 33, 38-41, 43, 45, 48 and 52 under 35 U.S.C. §103.

III. Rejection of Claims under 35 U.S.C. §103(a) as Unpatentable over Young in view of Weitz in further view of Skidmore

Claims 10, 28 and 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Young in view of Weitz and in further view of Skidmore et al ("A Prototype Notebook Based Environment For Computational Tools", IEEE, 1998) ("Skidmore"). Applicants respectfully traverse this rejection.

A. Non-obviousness of Claims Dependent from Independent Claims 1, 19 and 35

As discussed above, Young in view of Weitz fails to detract from the patentability of independent claims 1, 19 and 35, as amended. As such, Applicants contend that independent claims 1, 19 and 35 are patentable and in condition for allowance. Therefore, claim 10 dependent on amended independent claim 1, claim 28 dependent on amended independent claim

19 and claim 44 dependent on amended independent claim 35 are patentable and in condition for allowance. Accordingly, Applicants respectfully request the withdrawal of the Examiner's rejection of claims 10, 28 and 44 under 35 U.S.C. §103.

IV. New Claim 53

Claim 53 has been added to more fully appreciate the Applicants' claimed invention. Independent claim 53 is directed towards generating a reporting by processing a set of reporting components of a report template. The reporting components are configurable to define an operation to define one or more operations to perform within a technical computing environment. During generation of the report, at least one of the reporting components is initiated to bi-directionally communicate with the simulation during the execution of the simulation. None of the cited references disclose, teach or suggest initiating, during generating a report, at least one reporting component to *bi-directionally communicate with a simulation during an execution of the simulation*. Therefore, Applicants respectfully submit that claim 53 is patentable and in condition for allowance.

CONCLUSION

In view of the amendments and remarks set forth above, Applicants contend each of the presently pending claims in this application are in immediate condition for allowance. Accordingly, Applicants respectfully request the Examiner to pass the claims to allowance.

If the Examiner deems there are any remaining issues, we invite the Examiner to call the Applicants' Attorney at the telephone number identified below.

Respectfully submitted,
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